

### **iConverter 1000FF** Gigabit Fiber-to-Fiber Managed Media Converter

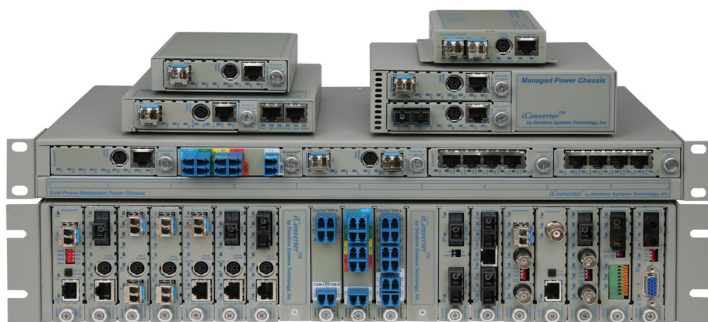
The *iConverter* 1000FF managed media converter provides multimode to single-mode and dual fiber to single fiber conversion, and is a cost-effective solution for extending fiber network distances.

*iConverter* 1000FF models feature SC connectors and are available with multimode, single-mode and single-fiber options. The single-mode fiber port supports distances up to 80km, and the multimode fiber port supports distances up to 550m.

The 1000FF features user-selectable Link Propagate and Remote Fault Detection modes to facilitate quick fault detection, isolation, and reporting.

The *iConverter* 1000FF is available as a compact, unmanaged standalone unit, or as a chassis plug-in module that can be managed with a management module installed in the chassis. The hot-swappable plug-in module can be mounted in a high-density 19 or 5-Module chassis with any combination of redundant AC and DC power supplies. It can also be mounted in a 2-Module AC or DC powered chassis, or in a 1-Module chassis with AC or DC power input.

The standalone 1000FF can be wall-mounted and is DC powered. It can be ordered with an external AC/DC power adapter, or it can be directly powered using a 2-pin terminal connector.



The *iConverter* Multi-Service Platform consists of Network Interface Devices, T1/E1 multiplexers, CWDM multiplexers and managed media converters that combine to deliver Carrier Ethernet and TDM services over fiber or CWDM wavelengths. This flexible architecture supports a wide variety of configurations for scalable and reliable fiber connectivity in Service Provider and Enterprise networks.



### **KEY FEATURES**

- 1000BASE-SX or 1000BASE-LX single-mode to multimode fiber converter
- Supports multimode, single-mode and single-fiber with SC connectors
- Supports distances of 80km or longer\*
- User-selectable link fault detection modes facilitate quick fault detection, isolation and reporting
- SNMP management via *NetOutlook*® provides real-time port and module information, remote parameter configuration and trap notification
- Management is available with the addition of a management module to the chassis
- Modules are hot-swappable in 19-Module, 5-Module, 2-Module or 1-Module chassis
- LED displays for immediate visual status of each port
- Lifetime Warranty and free 24/7 Technical Support

\*Contact Omnitron

|                                       |   |
|---------------------------------------|---|
| <b>Model Type</b>                     | <i>iConverter</i> 1000FF  |
| <b>Protocols</b>                      | 1000BASE-SX, 1000BASE-LX  |
| <b>Compliance</b>                     | UL, FCC Class A, CE, NEBS Level 3   |
| <b>Fiber Connectors</b>               | SC, Single-Fiber SC   |
| <b>Controls</b>                       | LP, RFD   |
| <b>LED Displays</b>                   | Power, FO link (2)  |
| <b>Dimensions</b>                     | Plug-in: W 0.85" x D 4.5" x H 2.8"<br>Standalone: W 3.8" x D 4.8" x H 1.0"                                    |
| <b>Weight</b>                         | Plug-in: 8 oz.<br>Standalone without Power Adapter: 1.0 lb.<br>Standalone with Power Adapter: 1.5 lb.         |
| <b>DC Power Connector</b>             | Plug-in: Power supplied by backplane<br>Standalone: 2.5mm Barrel Connector or 2 Pin Terminal Connector        |
| <b>DC Power Requirement (typical)</b> | Plug-in: 0.5A @ 3.3VDC<br>Standalone: 5 - 32VDC<br>0.3A @ 9VDC (1.0A max)                                     |
| <b>AC Power Adapter [US]</b>          | Plug-in: N/A<br>Standalone: 100 - 120VAC/60Hz<br>0.05A @ 120VAC   |
| <b>AC Power Adapter [Universal]</b>   | Plug-in: N/A<br>Standalone: 100 - 240VAC/50 to 60Hz<br>0.05A @ 120VAC   |
| <b>Temperature</b>                    | Standard: 0° to 50° C<br>Wide: - 40° to 60° C<br>Storage: - 40° to 80° C                                      |
| <b>Humidity</b>                       | 5 to 95% (non-condensing)   |
| <b>Altitude</b>                       | - 100m to 4000m   |
| <b>MTBF (hrs)</b>                     | Plug-in: 1,600,000<br>Standalone with US Power Adapter: 250,000<br>Standalone with Universal Adapter: 100,000 |

Management of the plug-in module is accomplished by using a Management Module (such as an *iConverter* NMM2 or 10/100M2) that provides monitoring, configuration and trap notification. The management module can be accessed via SNMP, Telnet, or serial port. The SNMP-based management is accomplished via Omnitron's intuitive, graphic-oriented *NetOutlook* management software or third party SNMP management software, while the Telnet and the serial interfaces have an easy-to-use, menu-driven interface.

Real-time 1000FF parameters that can be monitored include power, link, data receive status, module type and model, hardware and software revisions, serial numbers and a user-defined identifier.

The user can override the 1000FF module's physical DIP-switch settings by using SNMP or Telnet to configure DIP-switch-selectable parameters such as Link Propagate or Remote Fault Detection.

In addition to all standard *iConverter* SNMP traps such as module insertion and removal, the 1000FF modules can generate traps on port state changes including link-up and link-down. Trap monitoring of specific events can be selectively enabled or disabled by the network administrator.

# ORDERING INFORMATION

86xx - x - x x

|         |  |
|---------|--|
| <Blank> | Standard Operating Temperature Range Model |
| W       | Wide Operating Temperature Range Model     |

|         |  |
|---------|--|
| <Blank> | Plug-in Module                                     |
| D       | Wall-Mount with External US AC Power Supply        |
| E       | Wall-Mount with External Universal AC Power Supply |
| F       | Wall-Mount with DC Terminal Power                  |

| Model Type                                      | Connector Type SC/SC | Fiber Type Port 1 Port2 | Distance Port 1 Port2   | Tx Wavelength (nm) | Rx Wavelength (nm) | Min. Tx Power (dBm) | Max. Tx Power (dBm) | Min. Rx Sensitivity (dBm) | Max. Rx Sensitivity (dBm) | Link Budget (dBm) |
|---|----------------------|-------------------------|-------------------------|--------------------|--------------------|---------------------|---------------------|---------------------------|---------------------------|-------------------|
| 1000FF Dual Fiber                               | 8642-1               | MM/DF                   | 220 / 550m <sup>1</sup> | 850                | 850                | -10                 | -4                  | -17                       | -3                        | 7                 |
|   |                      | SM                      | 12km                    | 1310               | 1310               | -9.5                | -3                  | -19.5                     | -3                        | 10                |
|   | 8642-2               | MM/DF                   | 220 / 550m <sup>1</sup> | 850                | 850                | -10                 | -4                  | -17                       | -3                        | 7                 |
|   |                      | SM                      | 34km                    | 1310               | 1310               | -5                  | 0                   | -23                       | -3*                       | 18                |
|   | 8642-3               | MM/DF                   | 220 / 550m <sup>1</sup> | 850                | 850                | -10                 | -4                  | -17                       | -3                        | 7                 |
|   |                      | SM                      | 80km                    | 1550               | 1550               | -5                  | 0                   | -23                       | -3*                       | 18                |
|   | 8643-2               | SM                      | 12km                    | 1310               | 1310               | -9.5                | -3                  | -19.5                     | -3                        | 10                |
|   |                      | SM                      | 34km                    | 1310               | 1310               | -5                  | 0                   | -23                       | -3*                       | 18                |
|   | 8643-3               | SM                      | 12km                    | 1310               | 1310               | -9.5                | -3                  | -19.5                     | -3                        | 10                |
|   |                      | SM                      | 80km                    | 1550               | 1550               | -5                  | 0                   | -23                       | -3*                       | 18                |
| 1000FF Port 1 Dual Fiber<br>Port 2 Single-Fiber | 8650-1               | MM/DF                   | 220 / 550m <sup>1</sup> | 850                | 850                | -10                 | -4                  | -17                       | -3                        | 7                 |
|   |                      | SM                      | 20km                    | 1310               | 1550               | -9.5                | -3                  | -20                       | -3                        | 10.5              |
|   | 8651-1               | MM/DF                   | 220 / 550m <sup>1</sup> | 850                | 850                | -10                 | -4                  | -17                       | -3                        | 7                 |
|   |                      | SM                      | 20km                    | 1550               | 1310               | -9.5                | -3                  | -20                       | -3                        | 10.5              |
|   | 8652-1               | SM/DF                   | 12km                    | 1310               | 1310               | -9.5                | -3                  | -19.5                     | -3                        | 10                |
|   |                      | SM                      | 20km                    | 1310               | 1550               | -9.5                | -3                  | -20                       | -3                        | 10.5              |
|   | 8653-1               | SM/DF                   | 12km                    | 1310               | 1310               | -9.5                | -3                  | -19.5                     | -3                        | 10                |
|   |                      | SM                      | 20km                    | 1550               | 1310               | -9.5                | -3                  | -20                       | -3                        | 10.5              |
|   | 8652-2               | SM/DF                   | 12km                    | 1310               | 1310               | -9.5                | -3                  | -19.5                     | -3                        | 10                |
|   |                      | SM                      | 40km                    | 1310               | 1550               | -3                  | 0                   | -20                       | -3*                       | 17                |
|   | 8653-2               | SM/DF                   | 12km                    | 1310               | 1310               | -9.5                | -3                  | -19.5                     | -3                        | 10                |
|   |                      | SM                      | 40km                    | 1550               | 1310               | -3                  | 0                   | -20                       | -3*                       | 17                |

For wide temperature modules (-40 to 60°C), add a "W" to the end of the model number. Consult factory for other fiber configurations and extended temperature (-40 to +75°C) models. \*A minimum of 3dB of attenuation is required for these models. When using single-fiber (SF) media converter models, the Tx wavelength on one end has to match the Rx wavelength on the other.

<sup>1</sup>62.5/125µm, 100/140µm multimode fiber up to 220m. 50/125µm multimode fiber up to 550m. Refer to the fiber cable manufacturer for multimode distance specifications.

Trademarks are owned by their respective companies. iConverter and NetOutlook are registered trademarks of Omnitron Systems Technology, Inc.  
©2010 Omnitron Systems Technology, Inc. All rights reserved. Specifications subject to change without notice.  
091-18640-0071 9/10

**OST** Omnitron Systems  
Technology, Inc.

800-675-8410 • 949-250-6510 • www.omnitron-systems.com • info@omnitron-systems.com • 140 Technology Dr. Irvine, CA 92618